No. Pages  $\frac{13}{45}$  Copy No.  $\frac{3}{45}$ 

Joint Photographic Intelligence Report

## KIANGNAN NAVAL SHIPYARD SHANGHAI, CHINA



NAVY



CIA



PIC/JR-18/59 NOVEMBER 1959

**Declass Review by NIMA / DoD** 

COORDINATED, PUBLISHED, AND DISSEMINATED BY

CENTRAL INTELLIGENCE AGENCY

PHOTOGRAPHIC INTELLIGENCE CENTER

This document contains information usable only within the CONTROL SYSTEMS. It is to be seen on a MUST-KNOW BASIS ONLY BY PERSONNEL ESPECIALLY INDOCTRINATED AND AUTHORIZED. Reproduction is prohibited unless approved by the originator.

25

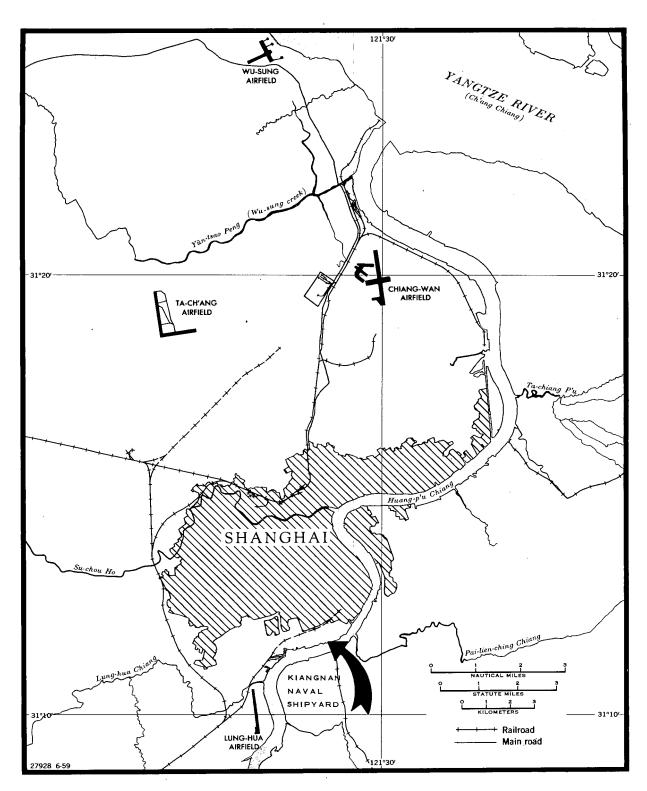
TOP SECRET e 2003/02/27 : CIA-RDP78T04757700660069705794

#### WARNING

This material contains information affecting the National Defense of the United States within the meaning of the espionage laws, Title 18, USC, Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

# KIANGNAN NAVAL SHIPYARD SHANGHAI, CHINA

PIC/JR-18/59 NOVEMBER 1959



Approved For F@Pas <b>§2003F07</b>	27 : CIA-RDP78T04751A0	00400010014-6
------------------------------------	------------------------	---------------

25X1

25X<sup>-</sup>

25X<sup>-</sup>

PIC/JR-18/59

### KIANGNAN NAVAL SHIPYARD SHANGHAI, CHINA

The Kiangnan Naval Shipyard, one of the largest shipyards in Communist China, occupies 137 acres on the west bank of the Huang-Pu River in southeast Shanghai (see Figure 1). Facilities at this shipyard include three graving docks (630', 555', and 520' long) and seven shipbuilding ways, measuring from 260' to 480' in length. This major shipbuilding facility is capable of constructing passenger vessels up to 7,800 tons gross, cargo vessels up to 6,500 tons gross, and naval.vessels, including submarines, up to 4,000 tons naval standard displacement.

25X1

I	Kiangnan Naval Shipyard has undergone considerable expansion and			
25X1	modernization since the excellent previous photo cover of			
.5/(1	(see Figure 2). At least 85 new buildings were constructed between			
	Some of these buildings were either			
	constructed as temporary structures, or sudden changes in planning were			
	implemented, for at least 18 of these new buildings were dismantled or			
	moved between During this same			
	period, six older buildings also were dismantled and 15 additional			
_	new buildings were completed. In addition, a new building way (Figure 2,			
	Item 27) and approaches to an offshore wharf (Figure 2, Item 11) were			
	completed.			

Changes appear to have been made in the function of several of the major components of the shipyard. Previously reported storage facilities appear now to have an engineering or fabrication connotation. Especially is this so in the extreme northwestern corner (Figure 2, Area A-1) of the shipyard where recent major changes have taken place, and also in the north-central portion (Figure 2, Area A-2) where the largest building (Figure 2, Item 21) in the shipyard has been completed recently.

25X1

PIC/JR-18/59



FIGURE 1. KIANGNAN NAVAL SHIPYARD.

25X1

- 4.

25X1

		PIC/JR-18/59
		110/01(-10/0)
X1 25X1	photograpother that The following submaring #2 Class and 170' 10 river 65' long propelled	poor quality and lack of stereo coverage of the phy preclude a detailed description of this recent expansion, an to detect the presence or absence of relatively large buildings. photography does not permit an accurate ship count, but the vessels were observed at this shipyard on 3 mes (''W'' Class),* 240' long; one PF (ex-Japanese Kaibokan s),* 6 dry cargo ships,* 400', 350', 230', 220', 200', long; 2 dry cargo ships, 430' and 380' long; one tanker, 470' long; one railroad ferry, 390' long; 2 tugs, 65' and 70' long; 3 selfd barges, 140', 135', and 80' long; 2 floating jib cranes; one repair shop, 50' x 20', on a barge 100' long.
		KEY TO ANNOTATIONS
	A-1 Shi	ipbuilding Area (Fitting Out)
25X1	1.	Storage building, 110' x 60'.
25X1	2.	Two shop/storage buildings, 105' x 60', 130' x 45'; one shop/storage building, 100' x 35' completed between  Six other buildings in vicinity were dismantled between
	3.	Probable shop building, 365' x 90' (completed between
25X1	4.	Two storage buildings, 60' x 25', 30' x 20'. Three other buildings in vicinity were dismantled between
2	5. 2 <b>5X1</b>	Two workshops, 100' x 30', 80' x 65', and five storage buildings, 55' x 50', 70' x 35', 70' x 40', 50' x 30', 80' x 20'. Two other buildings in vicinity were dismantled between
	*On	building ways or in graving docks.

Approved For REGRES 250 \$652/27 : CIA-RDP78T04751A000400010014-6

25X1 25X1

	A	pproved For Release 2003/02/27 : CIA-RDP78T04751A000400010014-6	25X1
		PIC/JR-18/59	25X1
25X1	6.	Two workshops, 70' x 35', 65' x 30', and six storage buildings 70' x 35', 45' x 25', 35' x 30', 50' x 20', 50' x 25', 85' x 60'.  One other building in vicinity was dismantled between	]
	7. 8.	Three storage buildings, 100' x 90', 100' x 40', 80' x 60'. Five workshops, 120' x 95', 90' x 55', 80' x 60', 35' x 35', 45' x 40'.	25X1
	9.	Four workshops, $160'$ x $145'$ with several small attached buildings; $125'$ x $25'$ with two small wings; $65'$ x $25'$ , $70'$ x $25'$ .	
25X1	10. 11.	Two buildings dismantled between  New offshore wharf, 530' x 40', with portal jib crane. Three of four approaches were completed between  At least five ships were tied to wharf on	25X1
25X1		photography, indicating this wharf is probably being used for fitting-out operations. West of wharf are two piers,	J 25X <u>1</u> 25X1
A-2	Shipb	ouilding Area (Assembly and Repair)	
	12.	Four workshops, 45' x 25', 80' x 45' with wing, 60' x 50', 80' x 30', 230' x 45' with attached section 45' x 35'; and one workshop 80' x 30' completed between	] 25X1
25X1	13.	Two storage buildings, each 120' x 45' and one storage building, 130' x 80', with a 90' x 35' section which was completed between	
	14.	Probable fabrication building, 250' x 140'.	25X1
	15.	Two storage buildings, 85' x 45', 145' x 60'.	
	16.	Mold loft and fabrication building, 225' x 45' with wing 120' x 45' and several adjacent service buildings having total roof area of $13,000$ sq. ft.	
	17.	Naval ordnance building, 135' x 45' and adjacent oxygen plant, 85' x $60$ '.	<b>0.5</b> 1/4
	18.	Three workshops, 130'x 45', 70' x 45', 110' x 55'; one workshop, 155' x 55' completed between and one storage building, 130' x 35'.	25X1 ]
	19.	Reported electric power substation. Image onphotography does not resemble usual power substation. Function of the two small buildings within the fenced area cannot be determined from present photography.	25X1
		- 6 -	

	Appr	oved For Respass 2008 02 27 : CIA-RDP78T04751A000400010014-6	25
		PIC/JR-18/59	25
25X1	20.	Seven workshops with total roof area of 24,500 sq. ft. One 50' section was completed between	25
23/(1	21.	Probable fabrication building 325' x 325', completed between with older adjoining administration section, 280' x 35'.	
	22.	Plate shop, 410' x 130', with wing, 155' x 70' and adjoining air compressor building, 55' x 55'.	
	23.	Five workshops, 130' x 30', with wing 60' x 50', 100' x 60', 50' x 40', 60' x 50', 60' x 50'. One other building in vicinity (reported as welding shop) was dismantled between	25
25X <sup>2</sup>			
	24.	Workshop, 300' x 80', with adjacent storage building, 75' x 25'.	
	25.	Two shipbuilding ways, each approximately 350' long, with portal jib crane between them.	
25)	26. ¥1	Three shipbuilding ways, each approximately 350' long, and screened from river by fence. Four small cranes in yard.	
20/	27.	New shipbuilding way, approximately 440' long, completed between	
	28.	Craneway, possibly 1,000' long, with one portal jib crane having a reported capacity of 40 tons.	
	29.	Shipbuilding way, approximately 480' long.	
	30.	Two marine railways, 360' and 260' long.	
•	31.	Three workshops, 75' x 45', 45' x 30', 35' x 35'.	
	32.	Drydock No. 3, 630' x 80', coping width 105'.	
<b>)</b>	33.	Seven workshop/storage buildings with total roof area of 18,500 sq. ft.	
	34.	Drydock No. 2, 555' x 60', coping width 100'.	
	35.	Steam power plant, $145' \times 35'$ , adjoining shop, $100' \times 50'$ , and small coal yard, $90' \times 55'$ .	
	36.	Pump house, $90' \times 40'$ and adjacent shops, with total roof area of 5,200 sq. ft.	
	37.	Drydock No. 1, 520' x 60', coping width 85'.	
	38.	Workshop area, many small buildings with total roof area of 31,900 sq. ft.	
1	39.	Two workshops, 90' x 35', 130' x 50'.	

Α	pproved For Release 2003/22/27 : CIA-RDP78T04751A000400010014-6	
	TOP SECKET	25X1
	PIC/JR-18/59	
		25X1
40.	Metalworking and blacksmith shop, 470' x 115'.	
41.	Machine shop and apprentice school, 470' x 150'.	
42.	Five workshops, one irregular shape with total roof area of 2,700 sq. ft., two are 55' x 25' and 95' x 25'. Other two, approximately 60' x 40' and 90' x 35', were completed between Adjacent offshore wharf, 675' x 25', is probably being used for fitting-out operations.	25X1
43.	Diesel engine repair shop, 145' x 75', with two adjoining sections, 50' x 30' and 85' x 20'. Three other buildings in vicinity were dismantled between Possible new construction activity is detectable on photography.	
44.	Storage building, 135' x 55' with small fenced yard.	25X1
45.	Three workshops, 85' x 75', 65' x 30', 55' x 30'.	
46.	Foundry and pattern shop, irregular shape, with total roof area of 50,120 sq. ft., and adjacent workshop, 100' x 30'.	
47.	Two storage buildings 75' x 45', 55' x 35'.	
48.	Electric shop, irregular shape, with total roof area of 9,000 sq. ft., and workshop, irregular shape, with total roof area of 14,600 sq. ft.	
49.	Fabrication building, irregular shape, with total roof area of 21,700 sq. ft. and adjoining shop, 75' x 60'.	
Wood	dworking Area	
50.	Three lumber storage buildings, $150' \times 45'$ , $130' \times 25'$ , $75' \times 35'$ .	
51.	Workshop, 100' x 75', with adjacent storage building, 110' x 45'.	
52.	Saw mill, 230' x 70', and adjacent storage building 100' x 40' with attached shed, 75' x 20'.	
53.	Workshop, 110' x 40', with wing 40' x 15', and adjacent storage building, irregular shape with total roof area of 14,000 sq. ft.	

Two lumber storage buildings,  $100' \times 40'$ ,  $100' \times 35'$ . Three other buildings in vicinity dismantled between

Lumber storage building, 85' x 40'. 55.

25X1

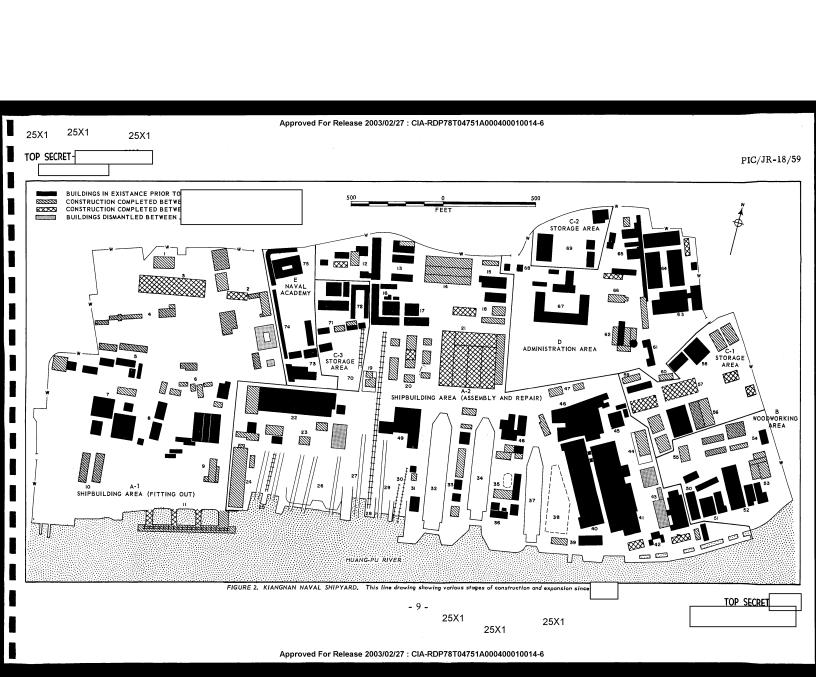
В.

25X1

54.

25X1

- 8 -



	Appr	oved For <b>Ferenses 2003 (DP</b> /27 : CIA-RDP78T04751A)00400010014-6	2
		PIC/JR-18/59	2
C-1	Stora	age Area	
	56.	Four storage buildings, 80' x 65', 80' x 65', 160' x 105', 150' x 55', with adjoining similar building dismantled between	
	57.	Four probable storage buildings completed between approximately 140' x 60', 175' x 100', 75' x 65', 55' x 55'.	2
	58.	Four storage buildings, 80' x 55', 100' x 80', 100' x 60', 100' x 60'.	
	59.	Two storage buildings, 100' x 35', 135' x 35'.	
D	Adm	inistration Area	
	60.	Barracks, 65' x 35'.	
	61.	East gate house, 130' x 20', with two wings each 30' x 15'.	
	62.	Water tower, 25' diameter, and associated service buildings, irregular shape, with total roof area, 10,500 sq. ft.	
	63.	Barracks, 195' x 80' with two attached service buildings, 170' x 40', 135' x 45'.	
	64.	Three reported barracks, each 195' x 80'. Size and design are not typical of Chinese barracks. Two adjacent service buildings, 45' x 35', and approximately 75' x 35'. The latter was completed between	2
	65.	Five storage buildings, $80' \times 30'$ , $50' \times 35'$ , $90' \times 45'$ with wing 30' x 15', 80' x 20', 50' x 50' with adjoining section 60' x 15'. Also adjoining are two storage sheds, $460' \times 20'$ , $175' \times 30'$ .	
	66.	Two administration buildings, 135' x 30', 90' x 40' with wing 20' x 20'; and one new administration building, approximately 105' x 35'. The latter was completed between	2
	67.	Main administration building, 290' x 50' with two wings each 110' x 50', and three service buildings, 60' x 20', 80' x 20', 120' x 40' with wing 80' x 40'.	
		Two gate houses, each 45' x 35'.	

C-2 Storage Area

25X1

25X1

25X1

Four storage buildings,  $140' \times 85'$ ,  $50' \times 45'$ ,  $80' \times 35'$ ,  $65' \times 60'$  with adjoining section  $50' \times 20'$ . 69.

PIC/JR-18/59

25X1

#### C-3 Storage Area

- 70. Open storage area with probable traveling crane.
- 71. Eight storage buildings, 75' x 40', 60' x 35', 170' x 55', 40' x 40', 50' x 35', 65' x 55', 85' x 75', 80' x 30'.
- 72. Vehicle repair shop and storage building, 100' x 25', with two wings, 155' x 25', 155' x 20'.

#### E Naval Academy

- 73. Four academy buildings, 75' x 40', 130' x 35', 75' x 45', 115' x 35' with wing 95' x 20', and adjoining section, 85' x 30'.
- 74. Shed, 370' x 15'.
- 75. Student officers' quarters, 145' x 100' with adjacent shed, 340' x 20'.

25X1

Approved For Release 2003/02/27 : CIA-RDP78T04751A000400010014-6	25
PIC/JR-	<b>25</b> 18/59
REQUIREMENT: This Joint Photographic Intelligence Report has prepared by Navy and CIA in partial answer to Navy require DNI 71-58 and in response to CIA requirement RR/E/R12 requesting an analysis of Kiangnan Naval Shipyard, Shanghai, C	ement 2/58,
	25
MAP DATA:	
25X1 ATMP 12-25MA, 2nd Ed., Oct 56. (S) 100, 2nd Ed., Oct 56. (S)	
REFERENCES:	
Air. 6004th Air Intell Sv. Sq., Wringer 6035-C (late 1952). CIA. GP/I - 191, 16 Jul 56. (S/ Army. R 379-57, G2-AFFE/8A(R), 500th MIG, 22 Mar 57. (S/ Army. R 472-57, G2 - USARPAC, USARISC, 3 Sep 57. (S/ CIA. NIS-39A - Sup. I, Jun 58. (S)	. (C) 25 25
COORDINATES: 31°12'N/121°29'E	
- 13 <b>-</b> 25X1	25X1
Approved For <b>₹ᡚ</b> ₽s <b>\$£008t</b> 02/27 : CIA-RDP78T047514000400010014-6	25X1

25X1